

14. Sales of timber, firewood and charcoal amounted to Rs. 5,76,616 and other revenue to Rs. 1,03,207.

15. The financial results of the Forest year are satisfactory, both the gross and net revenue being in excess of the previous year by Rs. 571 and Rs. 41,284, respectively.

## CHAPTER I.

### EXTENSION AND CONSTITUTION OF STATE FORESTS.

#### I.—Alteration of Area.

16. The changes in the area under the management and control of the Forest Department in the Sind Circle that have taken place during the past year are given in detail in Form No. 46. The following abstract statement shows the net results of these changes :—

| Class of Forest. | AT THE<br>COMMENCEMENT<br>OF THE YEAR. |        | CHANGES DURING THE YEAR. |        |                  |        | AT CLOSE OF THE<br>YEAR. |        | Remarks. |
|------------------|--|--------|--------------------------|--------|------------------|--------|--------------------------|--------|----------|
|                  |  |        | Added.                   |        | Excluded.        |        |                          |        |          |
|                  | Square<br>miles.                       | Acres. | Square<br>miles.         | Acres. | Square<br>miles. | Acres. | Square<br>miles.         | Acres. |          |
| Reserved ...     | 976                                    | 483    | 79                       | 236    | 59               | 185    | 996                      | 534    |          |
| Protected ...    | 4                                      | 555    | ...                      | ...    | ...              | 183    | 4                        | 372    |          |
| Total ...        | 981                                    | 398    | 79                       | 236    | 59               | 368    | 1,001                    | 266    |          |

Explanation of alteration of area.

17. The particulars of the changes by divisions are as below :—

**SUKKUR.**—There was a gain of 5,576 acres reserved by Government Notification No. 2405, dated 25th March 1895, and of 5 acres owing to a rectification of figures made under the Revision Survey. The loss amounted to 33,303 acres, consisting of the disforestation of 9,432 acres in Rohri Taluka under Government Resolution No. 5857, dated 10th July 1894, and of 23,871 acres in Thul Taluka under Government Resolution No. 3129, dated 26th April 1895. No additions have been made to the protected areas, but on the other hand a small block of 183 acres, known as Macaulay Forest, near Jacobabad, has been excluded.

As regards disforestments in this division, I am constrained to remark that the exclusion of 9,432 acres in the Rohri Taluka for the extension of cultivation was an ill-advised measure. The area in question was well wooded with an excellent growth of Kundee (*Prosopis Spicigera*) and capable of yielding at the very least five lacs cubic feet per annum besides being in close proximity of the North-Western Railway line between Rohri and Sangi stations. When it is remembered that it has been difficult to find some 50,000 acres conveniently situated to meet the requirements of the North-Western Railway and that of the Quetta Commissariat, and for the purpose of opening a cheap and permanent supply to the latter a scheme was under the consideration of Government to create near Kot Sultan a Tali (*Dalbergia Sissoo*) Forest on the lines of the Chunga Manga plantation in the Punjab, the disforestation of this block is not intelligible. In a case like this, I consider the interests of Government in the Forest Department ought to have prevailed over those in the Revenue Department. Moreover, it is necessary to state here that the conversion

of the disforested area referred to into a Tali Forest would not have cost anything like the amount which is estimated for the Kot Sultan project, as it comes within the direct influence of the annual floods and is at the same time safe from erosion.

**NAUSHAHRO.**—The net gain amounted to 6,787 acres; the area given up, 4,642 acres, was mostly poor and badly stocked, and there were no possible means of improving it, owing to protective bunds erected of late years by the Public Works Department having cut off its water-supply by natural overflow, whereas the acquisitions, 11,429 acres, consist of new formations, on which a promising mixed forest has already established itself.

**HYDERABAD.**—This division by the afforestation of 23,781 acres now commands an almost uninterrupted frontage on the left bank of the river extending over 90 miles. The areas acquired during the year were of little or no value to the Revenue Department, but as a whole, being fairly stocked and in which babul (*Acacia Arabica*) is asserting itself, they will in the near future supplement the resources which even now are considerable of this division.

**JERRUCK.**—The reserves added during the year lie chiefly in the delta proper of the Indus below Tatta, which in a few years, by careful protection and proper management, ought to prove of great value in further expanding the export trade in timber, firewood and other forest produce with Bombay and the ports on the Kathiawar Coast.

18. The distribution among forest divisions of the legally constituted area at the commencement and close of the year under report is given in the following statement :—

| Forest Division. | AREA ON 1ST JULY 1894. |        | AREA ON 30TH JUNE 1895. |        | DIFFERENCE.   |        | Remarks. |
|------------------|------------------------|--------|-------------------------|--------|---------------|--------|----------|
|                  | Square miles.          | Acres. | Square miles.           | Acres. | Square miles. | Acres. |          |
| Sukkur ... ..    | 449                    | 8      | 405                     | 263    | —43           | 385    |          |
| Naushahro ... .. | 232                    | 422    | 243                     | 169    | + 10          | 387    |          |
| Hyderabad ... .. | 159                    | 497    | 196                     | 598    | + 37          | 101    |          |
| Jerruck ... ..   | 140                    | 111    | 155                     | 516    | + 15          | 405    |          |
| Total ... ..     | 981                    | 398    | 1,001                   | 266    | + 19          | 508    |          |

19. The losses and gains of areas due to the changes in the course of the river have been extensive and somewhat disastrous. Out of 16,408 acres washed away, the Department lost about 10,000 acres of mature timber-bearing land. The following figures show the loss and gain in each division :—

| Division.        | AREA LOST. |  | AREA GAINED. |  | Remarks. |
|------------------|------------|--|--------------|--|----------|
|                  | Acres.     |  | Acres.       |  |          |
| Sukkur ... ..    | 6,800      |  | 7,800        |  |          |
| Naushahro ... .. | 4,857      |  | 5,260        |  |          |
| Hyderabad ... .. | 2,430      |  | 1,000        |  |          |
| Jerruck ... ..   | 2,321      |  | 1,096        |  |          |
| Total ... ..     | 16,408     |  | 15,156       |  |          |

20. The most notable change to be recorded in this connection is the gradual disappearance of the Lullia Forest in the Naushahro Division which, having been eroded continually for years past, has dwindled down to about 300 acres.

21. A sum of Rs. 1,284-9-7 was spent in keeping the eroding banks clear of trees to prevent their falling into the river and endangering navigation. Material to the value of Rs. 3,770-12-6 was saved from eroding banks; of this Rs. 2,923-12-6 worth has been disposed of; the balance remained in stock at the end of the year.

22. The following statement exhibits the progress made in acquiring new formations thrown up in front of and adjoining reserved forests under the orders of the Commissioner in Sind referred to in paragraph 15 of last year's administration report :—

| Forest Division. | No. of undecided claims on 1st July 1894. | No. of new claims. | No. OF CLAIMS DECIDED.       |                         |        | No. of claims undecided on 30th June 1895. | Remarks.             |
|------------------|---|--------------------|------------------------------|-------------------------|--------|--|----------------------|
|                  |   |                    | In favour of the Department. | Against the Department. | Total. |  |                      |
| Sukkur ... ..    | 1   | 3                  | 1                            | ...                     | 1      | 3  | 1 Kacha washed away. |
| Naushahro ... .. | 4   | 7                  | 6                            | 1                       | 7      | 3  |                      |
| Hyderabad ... .. | 2   | ...                | ...                          | ...                     | ...    | 2  |                      |
| Jerruck ... ..   | ...                                       | ...                | ...                          | ...                     | ...    | ...  |                      |
| Total ... ..     | 7   | 10                 | 7                            | 1                       | 8      | 8  |                      |

## II.—Forest Settlements.

23. Forest settlement work is practically finished in all the divisions, and only a few of the conservancy projects drawn up by the Forest Settlement Officer before closing his office at the end of March 1895 under the orders of Government passed in their Resolution No. 9438, dated 19th November 1894, remained to be disposed of.

24. Mr. Barrow, I. C. S., the Special- Officer appointed by Government Resolution No. 8431, dated 27th October 1892, entered upon his duties on the 23rd November 1892 and held charge of the Settlement Office up to 26th March 1895, a period of 28 months, during which time he had additional duties as Assistant Judge to perform for eight and was absent on privilege leave for three months, so that he was able to give his undivided attention to his regular duties for a period of about a year and a half only.

25. During this time, he submitted proposals under Sections 4 and 19 of the Indian Forest Act for acquiring 10,996 and 95,193 acres, respectively, and on his recommendation 38,330 acres were also disforested under Section 26. The necessary notifications under Section 4 having not been published in the Government Gazette before the abolition of Mr. Barrow's appointment, the enquiries affecting rights will have to be undertaken in the next year by Assistant and Deputy Collectors in whose jurisdiction the 10,996 acres noted above are situated.

26. While finally reporting on his work to the Commissioner in Sind, he has recorded his opinion that in the Sukkur, Naushahro and Hyderabad Forest Divisions there is very little land available for forest purposes, but he adds that in the Jerruck Division there are five tapas of Ghorabari Taluka which are capable of contributing an additional area of 12,000 acres.

27. The expenditure during the period the Settlement Office was retained amounted to Rs. 7,581, but this does not include charges on account of the Special Officer's salary and allowances. As these have not been debited to forest accounts, there are no means of ascertaining them from the records of the Department.

Cost of settlements.

28. The following statement shows the areas notified under Sections 4, 19 and 26 of the Forest Act, respectively, during the year of this report :—

Areas notified under Indian Forest Act.

| Forest Division. | AREA NOTIFIED UNDER |             |             | Remarks. |
|------------------|---------------------|-------------|-------------|----------|
|                  | Section 4.          | Section 19. | Section 26. |          |
|                  | Acres g.            | Acres g.    | Acres.      |          |
| Sukkur ... ..    | 34,442 29           | 7,891 7     | 33,486      |          |
| Naushahro ... .. | 3,583 21            | 11,429 21   | 4,642       |          |
| Hyderabad ... .. | 9,436 34            | 23,783 31   | ...         |          |
| Jerruck ... ..   | 9,275 21            | 18,270 23   | ...         |          |
| Total ... ..     | 56,738 25           | 61,375 2    | 38,128      |          |

Areas awaiting settlement.

29. The work left to be done in connection with forest settlement is summarized below :—

SUKKUR.—All the lands selected for reservation have been finally notified under Section 19 of the Indian Forest Act, with the exception of 26,702 acres in the Kashmir Taluka, on which orders of Government are awaited.

NAUSHAHRO.—A very small area (136 acres) which has been recently notified under Section 4 remains to be settled.

HYDERABAD.—Equally good results have to be recorded in this division, as fresh selections aggregating 9,634 acres made in the Hala, Manjhand, Kotri and Hyderabad Talukas only remain to be dealt with.

JERRUCK.—Selections and settlements are complete in this division.

### III.—Demarcation.

30. The Special Forest Settlement and Demarcation Officer had no time to demarcate the areas selected by him for reservation, as the tenure of the appointment was very short and he had to deal with large areas extending over the whole Province. Proposals, however, have been submitted by me to Government, through the Commissioner in Sind, offering to spare the services for six months during the touring season, 1895-96, of one of the Forest Officers attached to this Circle to carry out the demarcation on the ground of the recently selected areas by means of special marks.

Necessity for appointing a Demarcation Officer.

31. Boundaries and boundary-marks of existing reserves were carefully inspected by all Divisional Forest Officers, and such repairs as were deemed necessary were carried out, free of cost as usual, through the agency of cattle breeders, who are allowed to live within forest limits, and villagers, who are granted low-lying lands under the management of the Forest Department for cultivation. It is a pity that up to date no orders have been issued to Range Forest Officers

Boundaries, marks and paths.

to keep a record of the number of cairns replaced as well as repaired and the length of the lines cleared by these people in return for the privileges they enjoy. But it would be no exaggeration to say that this *modus operandi* saves the Department an expenditure of Rs. 10,000 at least annually, because it has to be remembered that in the Riverain Reserves, which are as a rule flooded for a period varying from three to four months, the work has to be renewed year after year.

#### IV.—*Surveys.*

32. Topographical sheets of the Indus Riverain Survey undertaken by a Survey party of the Government of India as soon as published are supplied to Divisional Forest Officers with a view to keeping a correct record of the changes brought about in the frontages of the riparian forest tracts by the Indus. Now that a Surveyor is attached to each Forest division, maps will be kept corrected up to date, and such a reliable record of changes will be of great value in proving the claims of the Department to new formations thrown up against forest boundaries when any disputes arise. But what is of more importance is that, with an accurate basis such as these maps will afford, it will be possible to prepare working schemes on sound silvicultural principles.

33. The permanent Surveyor attached to the Circle has performed a creditable amount of work during the year. Besides making a large number of copies of the Forest maps required for the use of Divisional and Range Forest Officers, he has surveyed about 33,000 acres of forest land, and at the close of the year was engaged in laying out coupes to be exploited in 1895-96 in the Jerruck Division.

## CHAPTER II.

### MANAGEMENT OF STATE FORESTS.

#### I.—*Regulation of Management.*

##### (a) *Working Plans and their Control.*

34. The forests continued to be worked according to the rough scheme introduced three years ago, under which one-twelfth part of each forest blocked nominally was set apart for the chief purpose of supplying firewood to the North-Western Railway and other consumers. The disadvantages of such a treatment are self-apparent and need not be discussed here, as I shall have occasion later on in this report to speak of them. Suffice it to say that proposals are being formulated with a view to the preparation of regular working plans according to the provisions of the Forest Department Code, 4th Edition.

35. A great deal has been said in previous reports regarding the peculiar conditions prevailing in the Sind Forests, one of which, and the chief one, is that the area of the most important forests is liable to serious fluctuations. But I am not prepared to recognize this difficulty as unsurmountable, and in my opinion it ought not to bar the way to a rational method of treatment being introduced. It goes without saying that it will entail additional labour in carrying out the provisions of the plan, but that cannot be considered a sufficient reason for delaying the application of sound silvicultural principles to the forests so situated.

36. The work of cutting up the forests into compartments has hardly made any progress, as during the year under report measurers possessing even an elementary knowledge of surveying could not be obtained owing to their being able to earn better wages on large public works which were under construction, such as the Jamrao Canal and the Kotri-Rohri Railway, than the Forest Department could offer.